

REMARKS/ARGUMENTS

Applicants would like to thank Examiner Marcantoni for the helpful and courteous discussion he had with Applicants' U.S. representative on December 13, 2005. At that time, Applicants' U.S. Representative discussed the calcium carbonate ranges as claimed in the claimed flat panel relative to the calcium carbonate ranges described in the cited references (Johnson, U.S. 4,428,775 and Merkley U.S. 6,777,103). Applicants noted that the cited references describe calcium carbonate levels that are outside the claimed calcium carbonate range. The Examiner agreed that the claimed calcium carbonate level of between 60 to 70% by weight of dry matter as claimed in Claim 29 is outside the range described in the references. However, the Examiner maintained that the references teach up to 50% by weight calcium carbonate. Applicants respectfully disagree for the following reasons.

Johnson describes a fiber-cement product which may contain silica and/or filler in amount of between 10% and 40% by weight (Abstract). The filler may be calcium carbonate (column 2, lines 63 and 64). Because the claim flat panel comprises calcium carbonate in an amount of between 40 to 70% by weight of dry matter, the claimed calcium carbonate range is outside the range described in Johnson. In addition, Johnson does not teach or suggest the use of pouzzolan in combination with calcium carbonate for a flat panel obtained without autoclaving. Therefore, Johnson does not teach or suggest all the claim limitations of the claimed flat panel, and accordingly, the claimed flat panel would not have been obvious over Johnson. As such, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 103(a) over Johnson.

Merkley describes a fiber cement composite that contains cement, silica and biocides and may also contain 0-50% density modifiers and 0-10% additives (column 9, lines 40-67). In the Office Action, the Examiner concluded that the density modifier can include calcium carbonate. This conclusion is incorrect. Merkley lists density modifiers in column 9, lines 9-

14 and lists additives in column 9, lines 14-22. Merkley lists calcium carbonate as an additive not a density modifier. As such, Merkley only describes calcium carbonate in a range of 0-10% not 0-50% as the Examiner concluded. Therefore, the calcium carbonate range described in Merkley is well outside the calcium carbonate range as claimed for the claimed flat panel. Because Merkley does not teach or suggest all the claim limitations of the claimed flat panel, the claimed flat panel would not have been obvious over Merkley. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 103(a) over Merkley.

In addition to the Famy declaration filed with the response on August 30, 2005, Applicants submit the attached Supplemental Declaration. The Supplemental Declaration provides additional data which shows the improvement in mechanical properties for flat panel compositions with various synthetic fibers.

The added results shown in Table 1 of the Supplemental Declaration demonstrate that various synthetic fibers (e.g. PVA or PP) play the same role as a reinforcement fiber.

Specifically, both PVA and PP provide similar and satisfactory mechanical properties. Moreover, cellulose (natural fiber) has much less influence in mechanical properties as do the various synthetic fibers.

Accordingly, the data presented in this declaration illustrate that Portland cement and synthetic fibers, as claimed, gives lower shrinkage value (WM %) with a low content of Portland cement and high content of calcium carbonate (Examples C and D) relative to the cited references which describe a high Portland cement content and a low calcium carbonate content (Example A). A similar shrinkage value is reached in systems C and D irrespective of the nature of the synthetic fibers. In addition, these data are representative of the claims and the results are surprising in that acceptable mechanical properties and low shrinkage values can be achieved.

Accordingly, even if one were to assume that a *prima facie* case of obviousness has been established, Applicants have rebutted that case with a showing of superior results as discussed above. Therefore, for this reason alone, the claimed flat panel would not have been obvious over the cited references and Applicants respectfully request that the Examiner withdraw the rejections over the cited references.

The rejection of the claims under 35 U.S.C. § 112, first paragraph has been obviated by amendment. As the Examiner will note, the claims have been amended such that they are free of the criticisms outlined on page 2 of the Office Action. Accordingly, Applicants request that the rejection be withdrawn.

The rejection of Claims 16 and 36 under 35 U.S.C. § 112, second paragraph has been obviated by amendment. As the Examiner will note, the claims have been amended such that they are free of the criticisms outlined on page 3 of the Office Action. Accordingly, Applicants request that the Examiner withdraw the rejection.

The rejection of Claims 9 and 29 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

The Examiner states that the term “from 2 to 10% by weight of fiber, at least some of which are synthetic fibers” is indefinite. Applicants respectfully disagree because the term provides the metes and bounds of the amount of synthetic fiber present in the claimed flat panel. The % by weight of the fiber in the claimed flat panel is 2 to 10 %. The fiber can contain both synthetic and natural fiber (see page 3, lines 13-24 of the specification). The term “at least some of which are synthetic fibers” means that synthetic fibers are necessarily present and can be from greater than 0 to 100% of the fiber based on the total weight of the fiber. Therefore, this term describes the metes and bounds of the synthetic fiber in the claimed flat panel, and accordingly, the term is not indefinite. Also note that the term natural

fiber is understood by those skilled in the art as a fiber product obtain from natural (i.e. non-man made) sources. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of Claims 9 and 29 under 35 U.S.C. § 112, second paragraph.

In light of the above remarks contained herein, Applicants respectfully submit that the present application is now in condition for allowance. Favorable reconsideration is respectfully requested.

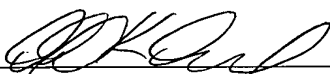
Respectfully submitted,

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